

Responses to DOE CD-1 Review Committee Recommendations to C0 IR Subproject

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Draft 5/5/04

1) Increase AP manpower to work on beam dynamics during preliminary design phase

We concur with this recommendation. An additional accelerator physicist (Tanaji Sen) has been formally assigned to this project. He has already made some contributions. In addition, Meiquin Xiao will continue to provide calculational support for tracking studies.

2) Study failure modes that could damage pixels

We concur with this recommendation. A physicist in the AD Tevatron Department (Xiaolong Zhang) has been formally assigned as liaison to the C0 IR project, and he will lead this study in conjunction with the pixel group and members of the AD Integration Department.

3) Determine effect of BTeV pixels on beam dynamics

We concur with this recommendation, but it is properly the responsibility of the pixel group (WBS1.2), which has already done substantial work on this subject.

4) Assess viability of hanging support system well before release of vacuum vessel RFP in Feb. 05

We concur with this recommendation. A mockup will be constructed within the next few months, and mechanical tests will be performed.

5) Resolve HTS lead issue before CD-2

We concur with this recommendation. Another potential vendor will be visited in May.

6) Aggressively pursue choice of vendor for correction coils with emphasis on schedule

We concur with this recommendation. BNL will be visited in May to discuss their previous corrector proposal. During the Summer, 3 other labs that have responded to our LOI will also be visited.

7) Review preliminary spool design prior to CD-2 if possible

We concur with this recommendation. Additional engineering support is being applied to spool design. A design study will be initiated in 7/04. We will be contacting ~10 potential vendors requesting their input on design and technical requirements.

Paraphrase of part of J Butler's btev-doc-3046 "Next Steps Post Lehman 1"

? BTeV collaboration will submit 2 schedules:

- 1)
 - with current funding profile;
 - likely to be judged "highly likely to succeed";
 - 6-12 months later than current schedule and staged;
 - this is what we will be baselined on
 - **What does this mean for the C0 IR?**
 - '09 shutdown starts 8/1/09**
 - tunnel devices to be delivered by 10/1/09**
 - everything ready to be tested by 12/1/09**
 - we need ~10 months schedule float**
- 2)
 - accelerated schedule, with the same completion date as presented at CD1;
 - also judged to be "highly likely to succeed";
 - requires new guidance on funding profile;
 - don't worry about this yet

? BTeV collaboration will submit new report with "baseline-able" schedule by June 1

? Lab will review this on May 27 – 28 before it goes to DOE

- **will concentrate on schedule**
- **hopefully only a small subset of C0 IR team will need to participate in this review**